

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method of manufacturing a disk drive formed from a head disk assembly (HDA) containing at least one magnetic disk with a magnetic surface and a head stack assembly (HSA) that includes a transducer head with a write element for writing data to the magnetic disk and a read element for reading data from the magnetic disk, the method comprising the steps of:

mounting the HDA in a servo track writer and moving the HSA to desired positions over the magnetic disk;

measuring a width of the read element with the servo track writer;

measuring a width of the write element with the servo track writer;

determining a track pitch based on the measured width of the read element and the measured width of the write element; and

writing servo tracks onto the magnetic disk at the determined track pitch.

2. (Original) The method of Claim 1 wherein the HDA carries a controller card having a microprocessor that is placed in communication with the STW when the HDA is mounted in the STW and wherein the microprocessor participates in the steps of measuring the widths of the read and write elements

3. (Original) The method of Claim 1 wherein the HDA is a bare HDA and wherein the STW includes independent processing capability for performing the steps of measuring the widths of the read and write elements.

4 (Original) The method of Claim 1 wherein the HDA contains a plurality of magnetic surfaces and corresponding transducer heads, wherein the measuring steps are performed for each transducer head to establish a collection of width measurements; and wherein the determining steps is accomplished based on the collection of width measurements.

5. (Original) The method of Claim 1 wherein the steps of measuring the width of the read element and the width of the write element are accomplished by:

- writing a calibration track with the write element;
- positioning the read element to a first side of the calibration track;
- gathering amplitude data by incrementally moving the read element from the first side of the calibration track to a second opposite side while reading data at each incremental position; and
- calculating the width of the read element and the width of the write element based on the amplitude data.

6. (Original) The method of Claim 1 wherein the step of determining a track pitch based on the measured width of the read element and the measured width of the write element is accomplished by:

- establishing a nominal pair of width values;
- using a nominal track pitch when the measured widths are within corresponding +/- limits of the nominal pair of width values;
- using a narrower than nominal track pitch when the measured width of the write elements is narrower than the - limit of the nominal width value of the write element; and
- using a wider than nominal track pitch when the measured width of the write element is wider than the + limit of the nominal width value of the write element.

7. (Original) A disk drive comprising a head disk assembly (HDA) containing at least one magnetic disk that includes a magnetic surface and a head stack assembly (HSA) that

includes a transducer head with a write element for writing data to the magnetic disk and a read element for reading data from the magnetic disk, the disk drive produced using the steps of:

- measuring a width of the read element while the HDA is in a servo track writer;
- measuring a width of the write element while the HDA is in a servo track writer;
- determining a track pitch based on the measured width of the read element and the measured width of the write element; and
- writing servo tracks onto the magnetic disk at the determined track pitch.

8. (Original) The disk drive of Claim 7 where the transducer head with a write element for writing data to the magnetic disk and a read element for reading data from the magnetic disk is a magneto-resistive transducer head.

9. (Original) The disk drive of Claim 7 wherein the HDA contains a plurality of magnetic surfaces and corresponding transducer heads, wherein the measuring steps are performed for each transducer head to establish a collection of width measurements; and wherein the determining steps is accomplished based on the collection of width measurements.

10. (Original) The disk drive of Claim 7 wherein the steps of measuring the width of the read element and the width of the write element are accomplished by:

- writing a calibration track with the write element;
- positioning the read element to a first side of the calibration track;
- gathering amplitude data by incrementally moving the read element from the first side of the calibration track to a second opposite side while reading data at each incremental position; and
- calculating the width of the read element and the width of the write element based on the amplitude data.

11. (Canceled)